

Application No. 10/010,715

REMARKS

Claims 1-35 are pending. By this Amendment, claims 1, 21, 24, and 25 are amended for clarity with respect to the term visualization agent. The claims in recently issued and commonly owned and assigned U.S. Patent No. 6,818,018 are attached for potential reference. Excerpts from an article by Gruber in *Prog. Polym. Sci.* are included, as well as an Appendix with pages numbered A1-A23.

The Office Action has maintained an obviousness type double patenting rejection of the present claims in light of U.S. Patent No. 6,566,406. The Applicants are prepared to promptly provide a terminal disclaimer over U.S. Patent No. 6,566,406 if the present claims are indicated to be otherwise allowable.

Claims 1, 2, 5, 8-12, 24-25, and 24-27 have been rejected under 35 U.S.C. §103(a) in light of Hubbell et al. (U.S. Patent No. 5,410,016). Claims 2-4, 6-8, 12-20, 23, 26, and 28-25 have been rejected in light of Hubbell et al. and Rhee et al. (U.S. Patent No. 5,874,500). Claims 21-23 have been rejected under 35 U.S.C. §103(a) in light of Hubbell et al. and Hsu et al. (U.S. Patent No. 5,192,743). The Examiner is thanked for clarifying the combinations of references used for rejection of the claims in the last office action.

The Office Action has argued that the photosensitive dyes used to initiate polymerization in Hubbell et al. provide the claimed element of a visualization agent as claimed in claims 1-12 and 21-27 (pages 3-9 of the Office Action). The enclosed article by Gruber et al states that a photoinitiator "can be defined as a molecule which absorbs energy, either directly or indirectly, from a photon and subsequently initiates photopolymerization. The [photoinitiator] is consumed during the process." Gruber, page 93, last full ¶, emphasis added. Since the photoinitiator is consumed, it is not present after the gel is formed. Therefore Hubbell et al. does not supply the claimed visualization element and there can be no prima facie case of obviousness. Withdrawal of the rejection of claims 1-12 and 21-27 is therefore respectfully requested.

Application No. 10/010,715

With respect to claims 13-20 and 28-35, the Office Action has argued that the photosensitive initiators used to initiate polymerization in Hubbell et al. provide the claimed element of a visualization agent as claimed in claims 13-16, 19, 30, 31, and 33-35 and that Rhee et al. provide the claimed visualization agent for at least some of the claims 13-20 and 28-35. As already discussed, it is believed that Hubbell et al. does not supply the claimed element of a visualization agent.

With respect to Rhee et al., the Office Action has indicated that Col. 10 lines 63-67 of Rhee et al. teaches the claimed visualization agents including fluorine to improve visibility (page 13 of the Office Action). What Rhee et al. states in the referenced passage, however, is that "The crosslinked polymer compositions can also be prepared to contain various imaging agents such as iodine or barium sulfate, or fluorine, in order to aid visualization of the compositions after administration via X-ray, or <sup>19</sup>F-MRI, respectively" (emphasis added). The additives are proposed for visualization by X-ray and MRI, are not directed to reflecting or emitting light at a wavelength detectable to a human eye.

In fact, iodine, barium sulfate and fluorine, when used as taught in Rhee et al., would not be expected by a person of ordinary skill in the art to be effective as visualization agents for enhancing visualization using the human eye. In fact, PERFLUBRON® is a clear, colorless liquid (page A5 of Appendix near arrow) that is a tradename for perfluorooctylbromide (page A10 of Appendix near arrow) that is used for MRI (page A10 under "description") that involves fluorine-19 (page A11 of Appendix near arrow). And barium sulfate is a "milky" solution that is not recognized as a dye or a visualization agent for the human eye (page A12 of Appendix, see "barium swallow"). And iodine used in X-ray imaging is available as iopamidol (see "iopamidol" page A13 and under "description" on page A14 of Appendix) that is sold under the trade name ISOVUE® (page A14 of Appendix) which is a clear aqueous solution (page A20, in "section 9"). Rhee et al. therefore does not teach or suggest the claimed element of a visualization agent for

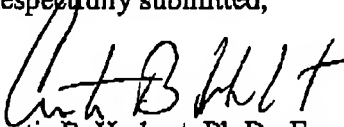
Application No. 10/010,715

visualization using a human eye because all of the agents taught or suggested in the Rhee et al. patent are not taught by Rhee et al. for visualization using X-ray or MRI and are of little use for detection by a human eye. Further, Rhee et al. describes gels made using the methods of Rhee et al. as being clear for optical purposes: "A feature of the invention is that the crosslinked polymer compositions are optically clear, making the compositions and methods of the invention particularly suited for use in ophthalmic applications in which optical clarity is a requirement" see Rhee et al. col. 3 lines 27-32; and "Because of their optical clarity, the crosslinked polymer compositions of the invention which do not contain collagen are particularly well suited for use in ophthalmic applications" see Rhee et al. col. 18, lines 2-6. These teachings that the gels are to be clear are in contrast to the claimed visualization agents that are intended to be detectable by the human eye. Since Rhee et al. does not teach or suggest the claimed visualization agents for visualization by a human eye, it is respectfully pointed out that, in the absence of this element, there is no prima facie case of obviousness. For all of the above reasons, the withdrawal of the rejection of claims 13-20 and 28-35 is requested.

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,

  
Curtis B. Herbert, Ph.D., Esq.  
Registration No. 45,443

Customer No. 24113  
Patterson, Thuent, Skaar & Christensen, P.A.  
4800 IDS Center  
80 South 8th Street  
Minneapolis, Minnesota 55402-2100  
Telephone: (612) 349-3008